

GOV DOC

BRA

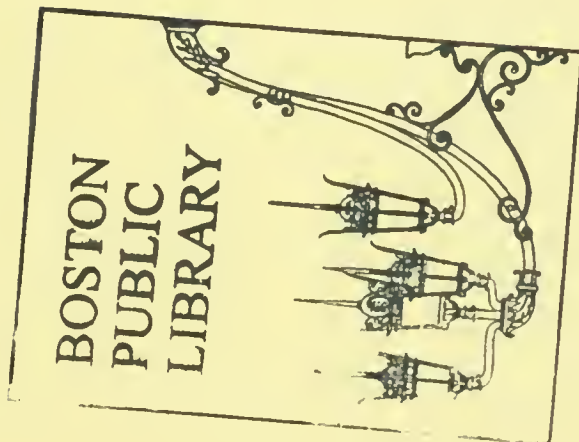
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Charlestown
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BOSTON

CHARLESTOWN SAVINGS BANK MAIN OFFICE EXPANSION FEASIBILITY STUDY



**THE ARCHITECTS COLLABORATIVE
CAMBRIDGE, MASSACHUSETTS**

EXISTING
CSB MAIN
OFFICE



SUMMARY OF FINDINGS

The Charlestown Savings Bank selected The Architects Collaborative to conduct a feasibility study for the Main Office Expansion. This report is intended to illustrate in a systematic manner the various stages of work: preliminary programming, site evaluation, comparative analysis of feasibility proposals, and recommendations.

Preliminary Programming

During the programming stage of the feasibility study careful consideration has been given to the goals which will be used as design determinants. The space requirements for the project have been established at a minimum of 128,000 Gross Square Feet plus parking for up to 50 cars. The proposed schedule projects an occupancy date of late 1975.

Site Evaluation

The site evaluation considered the land use, circulation, zoning and building codes, BRA proposals, and natural features of the Central Business District and the existing Charlestown Savings Bank site.

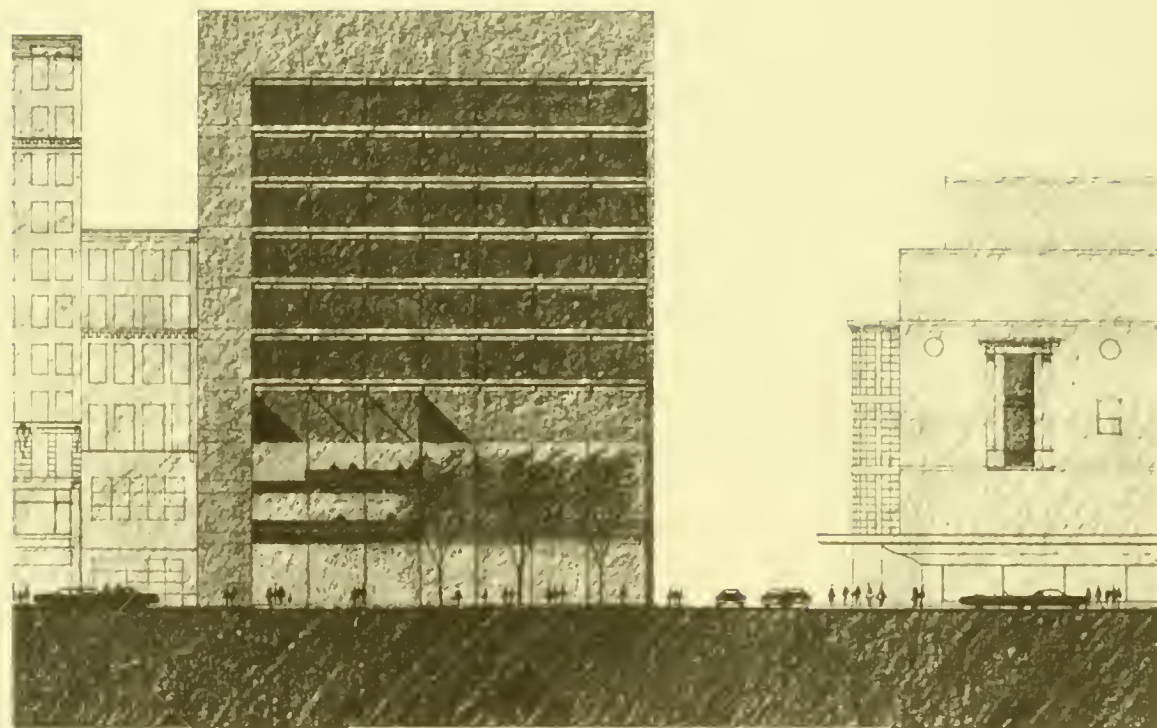
Comparative Analysis of Alternative Proposals

The comparative analysis surveyed a variety of alternative proposals:

1. Remodel,
2. Remodel with new construction,
3. All new construction,
4. All new construction on an enlarged site, and
5. Purchase or construction at another location in the city.

Recommendations

The Architects Collaborative recommends that the Charlestown Savings Bank proceed immediately into schematic design developing a ten-story building with typical "L" shaped office floors. The Kingston Street properties allow interim use during construction and future expansion. A project cost of \$6-\$8 million should be anticipated.



SUMMER ST. ELEVATION

3B

CHARLESTOWN
SAVINGS BANK

Charlestown Savings Bank
Boston, Massachusetts

John E. Wilkinson, President
Robert W. Garver, Executive Vice President and
Main Office Expansion Committee Chairman
Charles F. Sherman, MOEC
John E. Stewart, MOEC
Kenneth N. S. Ferguson, MOEC
Cyril E. Jemson, MOEC

Thomas M. Horan, Board of Investment
Fred F. Stockwell, Board of Investment

ARCHITECTURE

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December 1972

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INTRODUCTION

On July 25, 1972 we attended a meeting at the Charlestown Savings Bank where we were informed that TAC had been selected as architects for a feasibility study for the Bank's Main Office. At this meeting we were given a copy of the "Main Office Expansion Committee Report". Two major objectives were cited in the report: (1) to determine whether land, in addition to that which the Bank already owns in the area, should be acquired, and (2) to project space requirements for the next three years and if possible for the next ten years.

The report established an estimated space need in 1985 of approximately 55,000 square feet net. In addition, "The extent to which our expectation of broadened future powers is borne out, these requirements will increase." The MOEC report cited a vigorous rate of growth by savings banks in general and the Charlestown Savings Bank in particular. Any alternative plan for housing this institution must recognize this growth and allow for orderly expansion in the future.

The "Main Office Expansion Committee Report" outlined five major alternatives available for expansion:

1. Remodeling of existing building,
2. Remodeling with new construction on vacant land now owned by CSB,
3. All new construction on land now owned by CSB,
4. Purchase of properties of 71 Summer and 75-81 Summer and develop the resulting 30,000 square feet site as a unit, or
5. Purchase or construct new Main Office at another site in the city.

Our study dealt with all of these alternatives and their variations.

This report is intended to illustrate systematically the various stages of work: preliminary programming, site evaluation, comparative analysis of feasibility proposals, and recommendations.

PRELIMINARY PROGRAM

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GOALS

Programming is a planning process during which goals are established, facts gathered, and needs stated. During the programming phase a conceptual framework of design objectives and space requirements are formulated which will provide the basic foundation for design in later project phases.

Initial programming work for the Charlestown Savings Bank Main Office Expansion consisted of group meetings and individuals interviews between TAC and CSB people. Aided by questionnaires, the interviews yielded qualitative and quantitative knowledge of the functional relationships and physical requirements of the Bank. There are a very few areas which remain unresolved as to scope and these are relatively small in area. They have been omitted from the space inventory.

All planning was based on a 1975 completion date with three years of internal growth, assumptions of organizational structure and growth, and accepted space planning standards.

Working Environment	A major objective in designing the new headquarters building must be to create an excellent working environment for the CSB employees. In particular, the building should emphasize pleasant and efficient work areas, direct communication, convenience and employee amenities. It should respond to the specific need of individuals in their diverse activities. This concern for the physical environment should be evident in all areas of the building design.
Main Banking Office	The image of the Bank will be largely formed by the impact of the Main Banking Office at street level. Therefore, the distinctive character of the Charlestown Savings Bank must be projected by its design. There will probably be no commercial space on the ground floor.
Internal Circulation	Movement systems for people, goods, and mechanical services should be clear and direct. Movement of heavy goods should be separated from movement of people. Entrances should be emphasized for easy identification and security control. Clear routes should be established for employee traffic from entrances to work areas and from work areas to employee related areas such as the cafeteria, for service, and for customer traffic.

Functional Organization	In order to optimize efficiency and interdepartmental communications, areas in the building should be grouped according to their functional relationships. Areas shared by several or all departments should be consolidated and centrally located.
Internal Flexibility	The building should be capable of internal reorganization to accommodate growth of departments or addition of newly authorized functions within the original building system. This type of flexibility can be facilitated by an appropriate structural span and by differentiating between areas for fixed as opposed to more changeable functions. Office areas must be adaptable to either closed or open planning to accommodate a variety of working conditions. Provisions must be made for future installation of data processing equipment.
Future Expansion	The building must be able to accommodate internal reorganization and possibly external expansion. A logical method and direction for both types of expansion should be incorporated into the initial design. A systematic method by which the Charlestown Savings Bank can expand its occupancy from approximately half of the building in 1975 to full occupancy at some future date must be clear.
Phasing	The Main Office Branch Bank is to remain functional on the site during all phases of construction. The relationship between phases must allow for construction of phase II with minimum interruptions to phase I functioning. At each stage, the function and appearance of the building must be satisfactorily resolved.
Parking	The building should be able to incorporate parking of up to 50 cars on lower level and possibly Kingston Street site for Bank and tenant use. Parking should be designed for efficiency and ease of maintenance.
Raised Sidewalk	The Boston Redevelopment Authority has developed plans for a second level moving sidewalk to run along Summer Street between South Station and the Retail district. Provisions must be made for the possible introduction of this raised sidewalk along the Summer Street edge of the CSB site.

MBTA	The possibility of a new entrance to the Washington Street MBTA station connected to the CSB site was investigated by TAC. For reasons of maintenance and aesthetics and because it seemed doubtful that new business would be generated, this proposal was rejected. Remote tellers, however, may be introduced at the MBTA lobby level.
Outdoor Relationships	The building design should emphasize opportunities for natural light and vistas from within the building. Views from surrounding streets at pedestrian level are of great importance in creating a proper image of the Bank. Indoor courtyards can be used in all seasons; outdoor terraces should be protected from adverse weather and noise.
Orientation	Careful attention should be paid to building orientation in order to provide effective sun control, to assure special light quality in certain areas, to prevent excessive heat gain or loss, and to protect outdoor activity areas from harsh winds and long shadows. Climatic conditions, wind direction, snow removal, etc. should be taken into consideration when determining building massing, locations of entrances, methods of pedestrian protection, and design of outdoor pedestrian areas.

SPACE
REQUIREMENTS

In conjunction with the corporation analysis and development of program goals and concepts, a quantitative analysis of space needs was made, based on projections of growth, personnel numbers, and work space needs in the next six years (for an occupancy date of 1975 plus three years internal growth).

Space Standards

As a basis for the projections, Space Standards were developed which set net square foot requirements for the typical work areas of CSB. The standardized areas include:

- Office Work Areas
- Clerical/Secretarial Areas
- Conference Areas
- Special Work Areas
- Storage Areas

The standards are based on the functional and equipment requirements of each space as determined from interviews at CSB, from employee questionnaires and from office space planning standards. Space requirements for non-standard spaces and core areas were formulated individually.

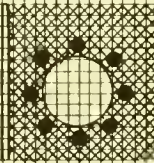
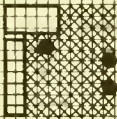
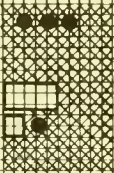
Examples of space standards for Office, Secretarial/Clerical, and Conference Areas are shown below.

A-3
150

B-2
100

C-2
200

D-2
80



Area	Space Type	Typically Assigned To:	NSF Allocation
A. Office Work	A-1 Multiple	Clerk	80
	A-2 Multiple	Clerk	100
	A-3 Mult/Priv	Manager/Dept. Head	150
	A-4 Mult/Priv	Platform/Dept. Head	200
	A-5 Private	Executive	250-500
B. Clerical; Secretarial; Reception	B-1	-	80
	B-2	-	100
	B-3	-	150
	B-4	-	200
	B-5	-	250
C. Conference	C-1	Conference for 4-6	150
	C-2	Conference for 8-10	200
	C-3	Conference for 12	250
	C-4	Conference for 20	600
	C-5	Training Room for 30	900
	C-6	Board Room for 30	1,500
D. Special Work	D-1	Computer Terminal	80
	D-2	Copy	80
	D-3	Teller	60
	D-4	Application Desks	50
E. Storage	E-1	Shelving	As needed
	E-2	Files	
	E-3	Fire proof files	
	E-4	Vault	
	E-5	Supply	
	E-6	Coat	
	E-7	Lockers	

Space Inventory Utilizing the framework of Space Standards, a Space Inventory was compiled, listing each required space in the corporation for 1978 and with the number of employee occupants housed therein, and the estimated net square foot requirement.

	SPACE AREA	MANPOWER	SPACE TYPE	NSF
1.0	<u>Executive Offices</u>			
	Chairman of the Board	1	A-5	500
	President	1	A-5	300
	Executive Vice President	1	A-5	300
	Office/conference	-	A-5	300
	Secretarial/reception	3	B-4 (3@200)	600
	Board Room	-	C-6	1,500
	1.0 Subtotal	6		3,500
2.0	<u>Auditing</u>			
	Auditor	1	A-3	150
	Secretarial	1	B-2	100
	Assistant	1	A-1	80
	Clerical/bookkeeper	4	A-1	320
	2.0 Subtotal	7		650
3.0	<u>Financial</u>			
3.1	<u>Financial Officer Area</u>			
	Vice President and Treasurer	1	A-4	200
	Secretarial	1	B-2	100
	3.1 subtotal	2		300

	SPACE AREA	MANPOWER	SPACE TYPE	NSF
3.2	<u>Data Processing</u>			
	Director	1	A-3	150
	Programmer/Analyst/Technician	7	A-2	700
	3.2 subtotal	8		850
3.3	<u>Accounting</u>			
	Comptroller	1	A-3	
	Assistant	1	A-2	
	Secretarial	1	B-2	
	Bookkeeper	6	A-1 (6@30)	480
	Computer Terminal	-	D-1 (2@80)	160
	Conference	-	C-2	200
	File	-		20
	3.3 subtotal	9		1,210
3.4	<u>Two-Way Accounts</u>			
	Supervisor	1	A-1	80
	Clerical	3	A-1 (3@80)	240
	3.4 subtotal	4		320
3.5	<u>Investments</u>			
	Investment Officer	1	A-3	150
	Secretarial	1	B-3	150
	3.5 subtotal	2		300
	3.0 Subtotal	25		2,980

	SPACE AREA	MANPOWER	SPACE TYPE	NSF
4.0	<u>Real Estate</u>			
4.1	<u>Real Estate Officer Area</u>			
	Vice President, Real Estate	1	A-4	200
	Secretarial	1	B-3	150
	4.1 subtotal	2		350
4.2	<u>Real Estate Production</u>			
	Assistant Vice President	1	A-4	200
	Assistant	1	A-2	100
	Secretarial	2	B-2 (2@100)	200
	4.2 subtotal	4		500
4.3	<u>Real Estate Origination</u>			
4.3A	<u>Real Estate Origination</u>			
	<u>Operations</u>			
	Assistant Vice President	1	A-3	150
	Secretarial	1	B-4	200
	Supervisor	1	A-2	100
	Clerical	5	A-1 (5@80)	400
	Interview	1	A-2	100
	4.3A subtotal	9		950

	SPACE AREA	MANPOWER	SPACE TYPE	NSF
4.3B	<u>Real Estate Origination</u> <u>Sales on M.B.O. Platform</u> Interview	2	A-4 (2@200)	400
	4.3B subtotal (included in Main Office Building Branch Bank subtotal)	2		400
	4.3 subtotal	9		950
4.4	<u>Real Estate Appraisal</u> Assistant Vice President Appraiser	1 6	A-2 A-1 (6@80)	100 480
	4.4 subtotal	7		580
4.5	<u>Real Estate Servicing</u> Assistant Vice President Mortgage Officer Secretarial Reception Tax Supervisor Mortgage Accounting Supervisor Assistant Clerical Teller Service Supervisor Assistant Clerical/file Files Collection Supervisor Assistant Clerical/typist	1 1 1 1 1 1 2 2 2 1 1 1 - 1 4 3	A-3 A-3 B-3 B-5 A-2 A-2 A-2 (2@100) A-1 (2@80) D-3 (2@60) A-2 A-2 A-1 E-2 A-2 A-2 (4@100) A-1 (3@80)	150 150 150 250 100 100 200 160 120 100 100 80 100 100 400 240

	SPACE AREA	MANPOWER	SPACE TYPE	NSF
	Out of State Supervisor	1	A-2	100
	Clerical Assistant	1	A-1	80
	Insurance Supervisor	1	A-2	100
	Clerical Assistant	1	A-1	80
	General Mortgage Clerical	1	A-1	80
	Conference	-	C-2	200
	Copy	-	D-2	80
	Computer Terminal	-	D-1 (3@80)	240
	File Storage--fire proof files	-	E-3	60
	Vault	-	E-4	40
	4.5 subtotal	28		3,560
	4.0 Subtotal	50		5,940
5.0	<u>Marketing</u>			
	Director	1	A-4	200
	Secretarial/reception	1	B-3	150
	Senior Researcher	1	A-3	150
	Junior Researcher	1	A-3	150
	Research Assistant	4	A-2 (4@100)	400
	5.0 Subtotal	8		1,050
6.0	<u>Savings Bank Life Insurance</u>			
6.1	<u>SBLI Operations</u>			
	Assistant Manager	1	A-3	150
	Clerical	8	A-2	800
	Conference	-	C-3	250
	6.1 subtotal	9		1,200

	SPACE AREA	MANPOWER	SPACE TYPE	NSF
6.2	<u>SBI Sales on M.B.O. Platform</u>			
	Manager	1	A-4	200
	Interview/clerical	2	A-4 (2@200)	400
	6.2 subtotal	3		600
	(included in Main Banking Office subtotals)			
	6.0 Subtotal	9		1,200
7.0	<u>Personal Loans</u>			
7.1	<u>Personal Loan Operations</u>			
	Department Head	1	A-3	150
	Assistant	1	A-3	150
	Clerical	6	A-2 (6@100)	600
	Computer Terminols	-	D-1 (5@80)	400
	Application Desks	-	D-4 (3@50)	150
	7.1 subtotal	8		1,450
7.2	<u>Personal Loan on M.B.O. Platform</u>			
	Assistant	1	A-4	200
	Interview	2	A-4	400
	7.2 subtotal	3		600
	(included in Main Banking Office subtotals)			
	7.0 Subtotal	8		1,450
8.0	<u>Operations</u>			

	SPACE AREA	MANPOWER	SPACE TYPE	NSF
8.1	<u>Personnel & Branch Operations</u>			
	Operations Vice President	1	A-3	150
	Secretarial/reception	1	B-5	250
	Persannel Director	1	A-3	150
	Assistant	1	A-2	100
	Training Director	1	A-2	100
	Branch Operations Director	1	A-3	150
	Application desks		D-4 (5@50)	250
	Conference	-	C-4	600
	Training Room	-	C-5	900
	8.1 subtotal	6		2,650
8.2	<u>Main Banking Office</u>			
8.2A	<u>Lobby (with Security Guards)</u>	2	estimated NSF	8,100
	8.2A subtotal	2		8,100
8.2B	<u>Platform</u>			
	SBLI	3	A-4 (3@200)	600
	Personal Loan	3	A-4 (3@200)	600
	Real Estate	2	A-4 (2@200)	400
	Savings			
	MOBB AVP	1	A-4	200
	Secretary	1	B-4	200
	Reception	-	B-4	200
	Assistant Manager	1	A-4	200
	Customer Service	1	A-4	200
	Supervisor			
	New Accounts	7	A-4 (7@200)	1,400
	8.2B subtotal	19		4,000

	SPACE AREA	MANPOWER	SPACE TYPE	NSF
8.2C	<u>Savings Operations</u>			
	Manager	1	A-2	100
	Assistant Manager	1	A-2	100
	Head Teller	1	A-2	100
	Night Supervisor	1	A-2	100
	Assistant Head Teller	3	A-1 (3@80)	240
	Clerical	2	A-1 (2@80)	160
	Tellers (16 windows + 2)	24	D-3 (18@60)	1,080
	Vault (no safe deposit)	-	E-4 est. NSF	280
	Computer Terminals	-	D-1 (3@80)	240
	Recap Room	-	-	300
	Men's Toilet Room	-	-	200
	Women's Toilet Room	-	-	200
	8.2C subtotal	33		3,100
	8.2 subtotal	54		15,200
8.3	<u>Corporate Services</u>			
8.3A	Cafeteria	5	- est. NSF	5,500
8.3B	Employee Lounge	-	- est. NSF	1,000
8.3C	Central File	3	- est. NSF	800
8.3D	Microfilm	2	- est. NSF	500
8.3E	Mail/Copy/Messenger	6	- est. NSF	600
8.3F	Purchasing/Receiving/Supply	3	- est. NSF	1,000
8.3G	Building Maintenance	3	- est. NSF	500
8.3H	Switchboard	3	- est. NSF	500
8.3I	Dead Storage	-	Not at main office	
	8.3 subtotal	25		10,400
	8.0 Subtotal	85		28,250
	TOTAL	198		45,020

A 1975 occupancy date plus three years internal growth has been assumed in the initial programming. Therefore, projections for 1978 are used to determine the occupancy space requirements.

The total Net Square Feet (NSF) figures were then converted to Gross Square Feet (GSF) by using assumed percentages for areas not included in the space inventory:

Mechanical	10%	GSF
Walls	2	GSF
Circulation and Cores	18	GSF
	<u>30%</u>	<u>GSF</u>

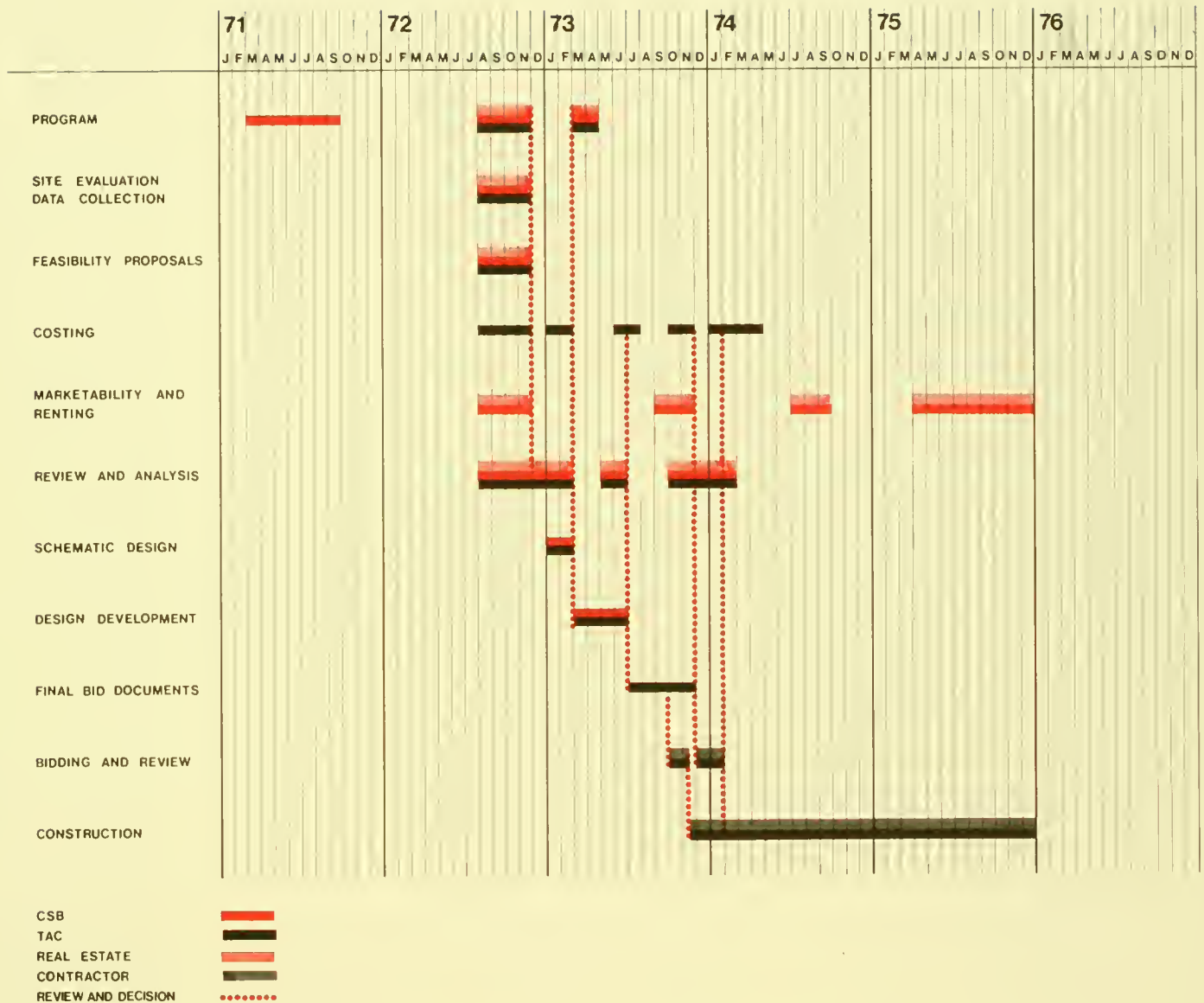
Space	Manpower	NSF	Total GSF
Executive Offices	6	3,500	
Auditing	7	650	
Financial	25	2,980	
Real Estate	50	5,940	
Marketing	8	1,050	
SBLI Operations	9	1,200	
Personal Loan Operations	8	1,450	
Operations			
--personnel and branch operations	6	2,650	
--Main Banking Office	54	15,200	
--corporate services (including cafeteria)	25	10,400	
Total	198	45,020	64,314

The Charlestown Savings Bank 1978 GSF sum is then multiplied by a factor to allow for CSB growth beyond 1978. In view of experiences of similar financial institutions this factor should be at least 2.

$$2 \times 64,314 = 128,628$$

Thus, 128,628 GSF is the minimum recommended total for the new Charlestown Savings Bank Main Office.

PROPOSED SCHEDULE



SITE EVALUATION

BOSTON'S CENTRAL BUSINESS DISTRICT

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CHARLESTOWN SAVINGS BANK SITE

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Land Use The present Charlestown Savings Bank is situated at the interface between Boston's retail core and the finance, insurance, and professional services portion of the central business district. Very near the site the proposed South Station development is expected to include parking for at least 3,500 cars. The new Blue Cross and Federal Reserve buildings are under construction in the South Station area along Summer Street. The Boston Redevelopment Authority currently is studying parcels south of Bedford Street in detail and the entire area surrounding the CSB site in general, but they have not yet come to any decisions. They tend to favor development of whole or half block parcels as opposed to small lots. The land use diagram presented on the following page outlines the various areas of Boston's CBD. The BRA CBD plans included proposals to realign and widen streets. However, these plans were not implemented, and major revisions to street patterns are unlikely.

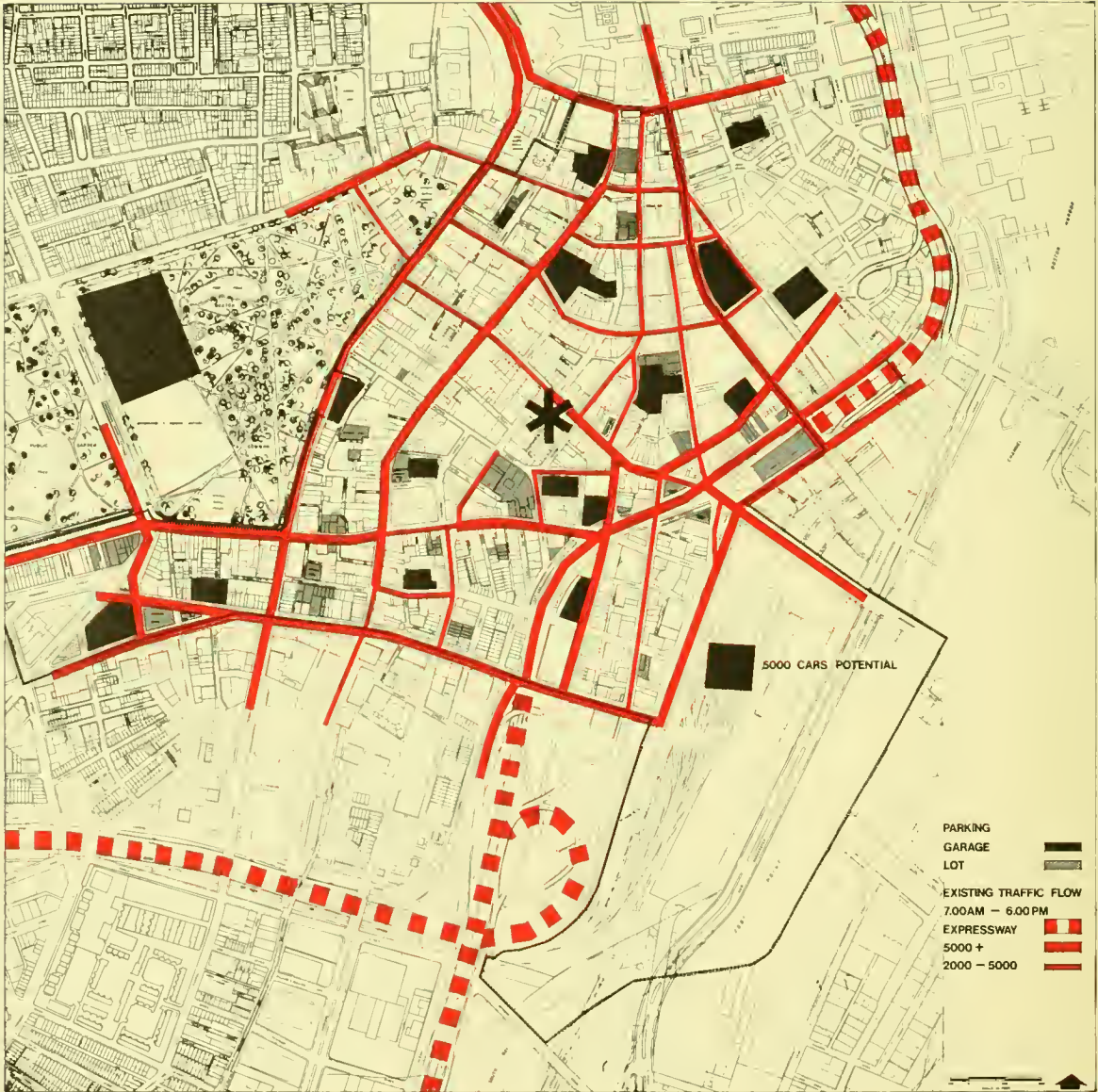
Circulation The Charlestown Savings Bank Main Office benefits from its close relationship to the MBTA, traffic and parking, and pedestrian networks that serve Boston. Plans showing the density and location of these systems follow the land use diagram.

LAND USE
DIAGRAM





TRAFFIC AND
PARKING



PEDESTRIAN
DENSITY

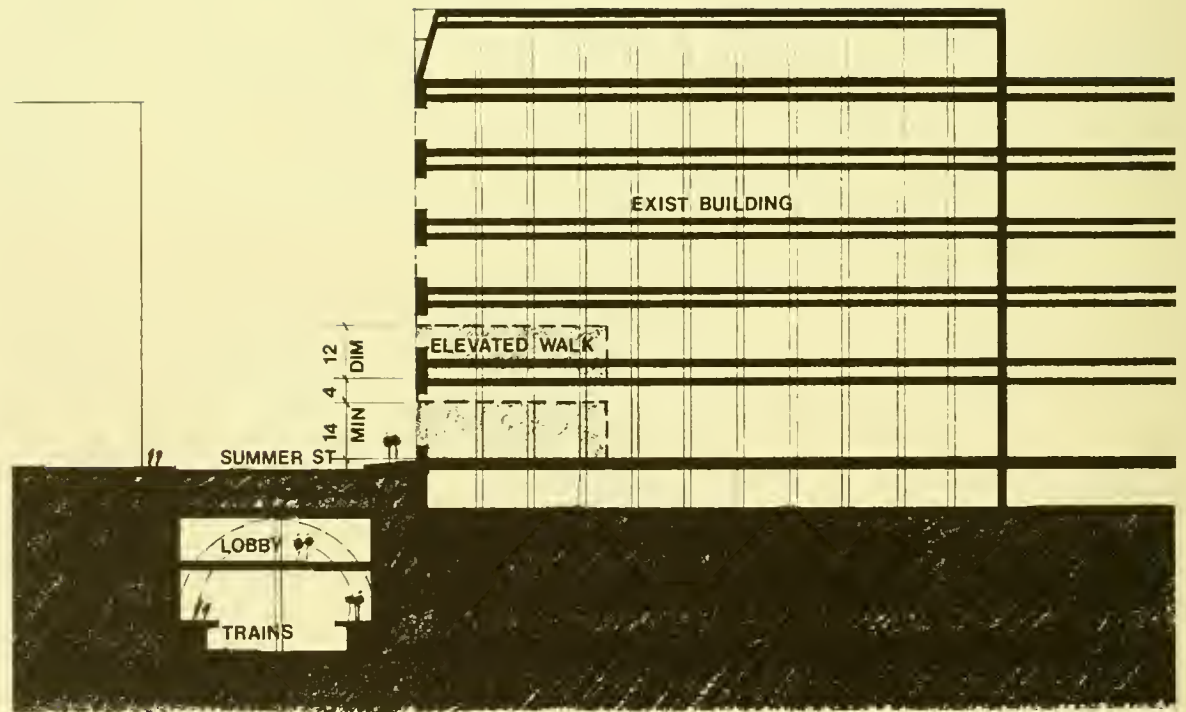


CSB Site The Main Office site owned by the Charlestown Savings Bank is a parcel of land bounded by Chauncy and Summer Streets with an additional frontage on Kingston Street comprising 22,347 square feet. The existing Charlestown Savings Bank Building and the existing building at 18-20 Chauncy cover 11,339 square feet of the total site. The buildings are six and five stories high respectively which is characteristic of the area. A further description of the existing buildings is contained in the discussion of proposals 1 and 2.

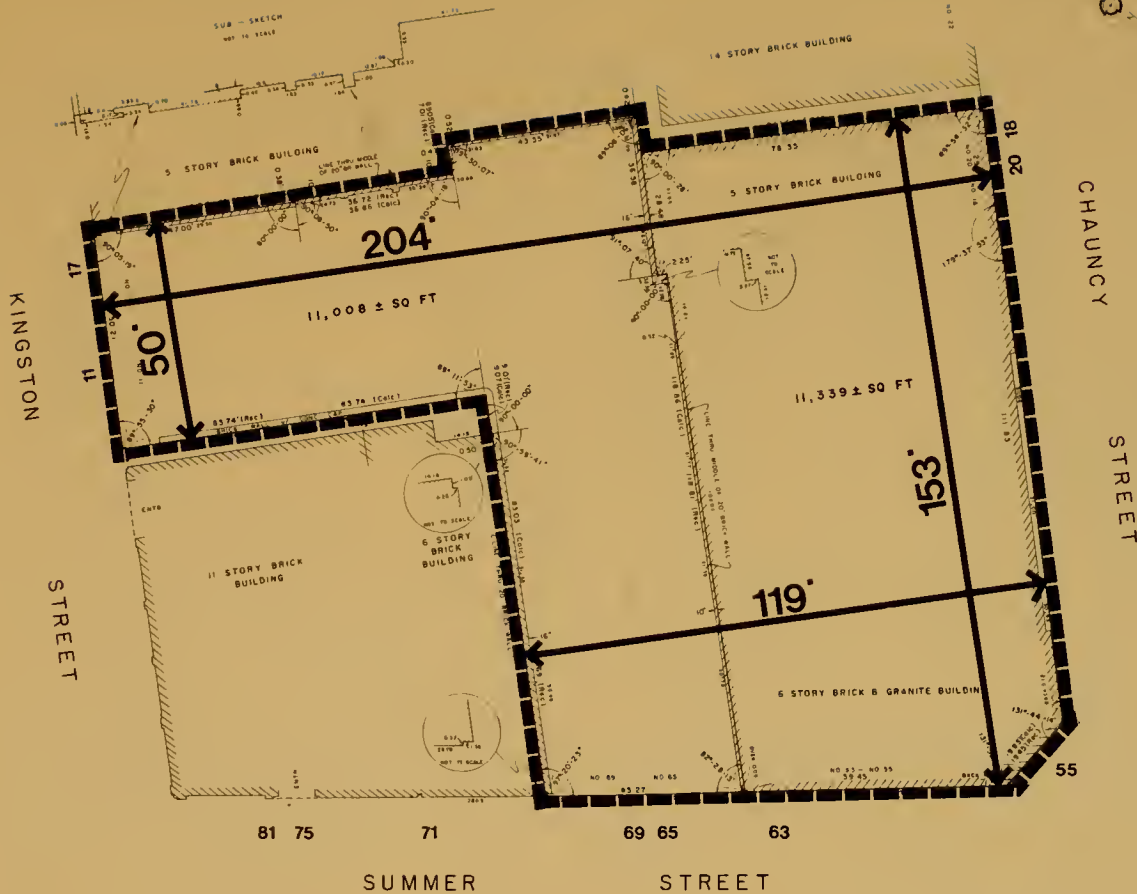
The land use at street level in the immediate vicinity of the CSB property is predominately small retail stores and restaurants with the notable exception of Jordan Marsh which is across Chauncy Street from the site. Many of the upper stories in the area are currently used for storage or are vacant.

A complete site evaluation was undertaken which included study of environmental conditions, views and vistas, topography and drainage, soil conditions, utilities, codes and zoning ordinances, BRA moving sidewalk proposals along Summer Street, access to Washington Street MBTA Station, car, truck, and bus traffic, and pedestrian circulation. A graphic summary of the findings is presented opposite.

[illegible]



SUMMER ST. SUBWAY TUNNEL SECTION



22,347 SQ. FT. +-

SITE PLAN

ZONING DISTRICT: B-10

USE: OFFICE BUILDING, BANK

YARDS REQUIRED: NONE

SETBACKS REQUIRED:

SUMMER ST: NONE UP TO 141 FEET

CHAUNCY ST: NONE UP TO 85 FEET

KINGSTON ST: NONE UP TO 175 FEET

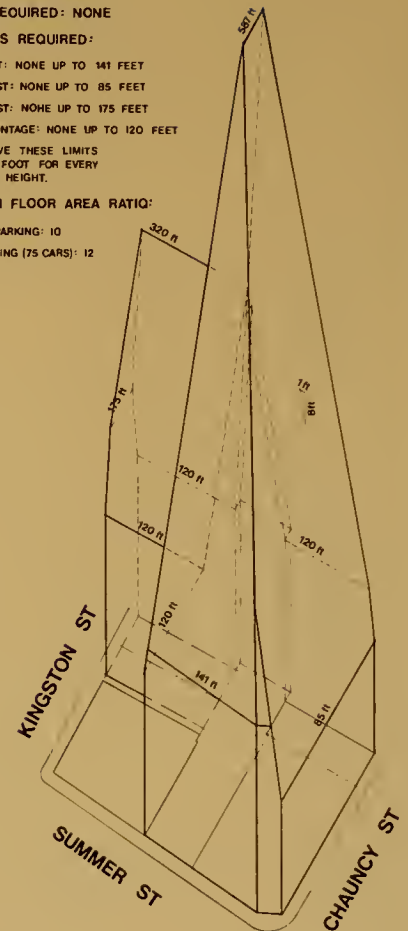
OTHER FRONTAGE: NONE UP TO 120 FEET

NOTE: ABOVE THESE LIMITS
SETBACK 1 FOOT FOR EVERY
8 FEET OF HEIGHT.

MAXIMUM FLOOR AREA RATIO:

WITHOUT PARKING: 10

WITH PARKING (75 CARS): 12



CHARLESTOWN SAVINGS BANK
ZONING ENVELOPE

ASSUMES FULL SITE UTILIZATION

COMPARATIVE ANALYSIS OF ALTERNATIVE PROPOSALS

1	REMODEL PRESENT STRUCTURE	44
2	REMODEL WITH NEW CONSTRUCTION	44
3	ALL NEW CONSTRUCTION TO CSB PROGRAM ON LAND PRESENTLY OWNED BY CSB	
	A. 13 FLOORS	52
	B. 10 FLOORS	54
	C. 9 FLOORS	56
	D. 7 FLOORS	58
4	ALL NEW CONSTRUCTION GREATER THAN CSB PROGRAM	60
5	PURCHASE OR CONSTRUCT NEW MAIN OFFICE AT ANOTHER SITE IN CITY	60

During comparative analysis many aspects of the alternative proposals were considered. The most important determinants during this stage of the feasibility study included functional efficiencies, internal flexibilities, expansion possibilities, real estate considerations, construction costs, structural and mechanical systems, materials, outdoor relationships, image, and urban context.

All of the alternative proposals presented in this report represent a building program of 130,000 Gross Square Feet plus parking for up to 50 cars. Construction will be phased to allow continuous Bank operation.

The Architects Collaborative have retained LeMessurier Associates as structural consultants, and Cosentini Associates as mechanical consultants for this study. We have examined the present building with representatives of these firms and they have made preliminary reports in letter form. These letters are included in this report. We assume that alternatives which involve remodeling, imply that the building be brought completely up to date in all possible aspects. Furthermore, the building should be made as fire safe as possible, whether it is required by law or not (and we believe that it is). We assume also that the existing floors will pass any load test which may be required by the City Building Department. Finally, we assume that the existing facade has no particular intrinsic value to the Bank.

The New Boston Building Code requires that buildings be designed to withstand earthquakes or seismic load. To achieve this most economically would involve a new rigid facade, interacting with the floors. If, for any reason, the existing facade had to be retained it could be done but at greater expense than the option budgeted below.

Smoke control, in the event of fire, has become of paramount importance in office buildings, due to recent disasters. All new buildings (and we must assume extensive remodelings) must have approved smoke control systems. These systems are subject to review and approval by the Boston Fire Department. Our experience indicates smoke control systems linked to central ventilating systems are the most desirable for office building occupancy and most readily acceptable to the Fire Department. These factors, and others delineated in the enclosed letter from Cosentini Associates, have brought us to the conclusion that we should budget all new mechanical systems.

The following budget was prepared with the above considerations in mind:

EXISTING
CSB BUILDING



Approximate costs (August 1972):
\$44 per square foot

Items Not Included

- Replace old floors
- Strengthen structural system
- "Bank standard" finishes (add \$10-25 per square foot)
- Escalation (7% to 8% per year)
- Contingent allowance

Based on one complete floor, 8,900 square feet:

General--include one-sixth per floor	SF	Unit Price	Item Total
Basement renovations and cleanup			9,000
Bank demolition 1st floor			4,500
Bank--protect and maintain regular bank operation			8,000
Street protection--public	194 LF	35.00	6,800
--rear sides	190 LF	25.00	4,750
Roof--remove old roofings and new T&G roof	8,900 SF	1.40	12,460
--renew all flashings	1,800 SF	1.20	2,160
Elevators--7 floors, 2500#, 500 FPM	3 ele.	68,000.00	204,000
Elevators--cut openings 10'x10' and make good	21 oprs.	400.00	8,400
--points	3 en.	800.00	2,400
--8" block walls	9,000 SF	2.10	18,100
--machine rooms	LS		5,500
Plumbing--exterior water, sewer	LS		8,500
Sidewalks, paving, and curbs			10,000
Sprinkler--mains, etc.			4,000
General total			308,570
General per floor @ 6 floors			\$ 51,400

Typical Per Floor	SF	Unit Price	Item Total
Demolition and clean up	LS		3,500
Scaffold in street	6,500 SF	.60	3,900
Remove front facade	3,270 SF	2.50	8,175
Remove rear walls	3,230 SF	2.00	6,460
New front walls and facade complete	3,270 SF	14.00	45,780
New rear walls complete	3,230 SF	8.00	25,840
Fire protection columns	2,300 SF	1.50	3,450
Floor fill lightweight concrete 4"	8,600 SF	1.40	12,040
Cement--plaster on lath over old ceiling	8,600 SF	.75	6,450
Susp. acoustic ceiling (public areas)	2,000 SF	.90	1,800
V.A. floor tile and base (public areas)	2,000 SF	.60	1,200
Masonry petitions plus plaster plus paint (public)	6,000 SF	2.00	12,000
Ceramic tile walls and floors	1,500 SF	3.00	4,500
Wood door plus frame plus hardware	16 Drs.	180.00	2,880
Stair--8" fire petition plus plaster and paint	650 SF	2.50	1,625
--4" steel pan stair 28R plus landing & rail	LS		2,800
Tenant area interior finishes at net cost	6,000 SF	5.50	33,000
Electrical--renew throughout	8,900 SF	4.00	35,600
HVAC new throughout	8,900 SF	5.25	46,750
Sprinkler new throughout	8,900 SF	.80	7,120
Plumbing (complete except mains)	10 fixtures	900.00	9,000
Fireproofing and code upgrade general	8,900 SF	.50	4,450
Redecorate old stairs, etc.	LS		1,200
Cut, patch, and make good	LS		3,500
			<u>283,020</u>
	General per floor		51,400
			<u>334,420</u>
	Overhead 8%		26,780
	8,900 SF @ 43.90/SF		<u>361,200</u>
	Profit 8%		<u>28,800</u>
			<u><u>390,000</u></u>

If such remodeling were undertaken it would compare in value to a new office building costing approximately \$40 per square foot. Thus, it can be seen that remodeling this particular building is not a reasonable economical alternative if others are available. In addition extensive remodeling would involve operational hardship for the Bank not necessitated by other alternatives. It would still be necessary to add space, either by building on the adjacent vacant lot (Scheme 2) or remodeling the 18-20 Chauncy Street building, or both, in order to satisfy the 1985 projected requirement, allowing for support space. If this were done, floor heights would not match between 55 Summer and 18-20 Chauncy. If floor heights were matched between 55 Summer and 65-69 Summer new construction, we would have to plan around the arbitrary and far from ideal existing building.

Bear in mind that the \$44 square foot cost, quoted for remodeling, and compared to an equivalent cost for new construction of \$40, is not the full cost the Bank would expect to pay for their main office. These numbers represent the cost of construction "to building standard" only. A typical savings bank would spend \$10 to \$25 additional per square foot in Boston.

Allowing for the added cost of demolition of 55 Summer and 18-20 Chauncy Street required for all new construction the balance of convenience, longevity, economy, and aesthetics, favor new construction overwhelmingly. We, therefore, recommend those alternatives which result in new construction and advise against remodeling the existing building.

Cosentini Associates

CONSULTING ENGINEERS

HITTINGER & SCHLOSSBERG ASSOCIATES

ELECTRICAL ENGINEERS

44 Brattle Street, Cambridge, Mass. 02138

Telephone (617) 876-3840

Richard P. Leber
William Lawrence
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M. A. Moss, P.E.
J. Worslow, P.E.
D. Michael, P.E.
A. Tinsie, P.E.

August 11, 1972

THE ARCHITECTS COLLABORATIVE
46 Brattle Street
Cambridge, Massachusetts 02138

Attention: Mr. Joseph Hoskins

Re: Charlestown Savings Bank

Gentlemen:

We have made a preliminary survey of the existing mechanical and electrical systems for the above referenced project. The following is a result of that survey.

1. First and Second floors of the building are Heated and Cooled by an all-air terminal reheat type system and a perimeter steam heating system. Air Conditioning is provided by Self-contained Water Cooled Air Conditioning Units. The cooling medium is provided by a cooling tower and condenser water pumps. The system was installed approximately 12 years ago and is apparently operating satisfactorily.

If the building is to be renovated, reuse of the existing air conditioning system will be contingent on

- a. New Facade Treatment
- b. Condition and age of the Mechanical equipment
- c. Type of Mechanical system recommended for air conditioning of the entire building

The perimeter steam heating system for the first and second floors will have to be replaced.

Two Pennsylvania Plaza
New York, N.Y. 10001

640 North La Salle Street
Chicago, Ill. 60610

THE ARCHITECTS COLLABORATIVE 8/11/72

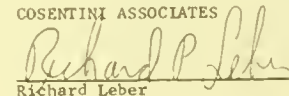
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2. The remaining floors of the building are provided only with perimeter steam heating system which must be replaced.
3. Basement storage areas and Mechanical service rooms are inadequately ventilated.
4. Toilets on first and second floors remodeled approximately 12 years ago. Third through sixth floors will have to be provided with new Toilet facilities.
5. Entire building is presently provided with a Sprinkler system. If building is to be renovated, it will have to be reviewed with Building Department and Fire Marshal to determine if Sprinkler system is required.
6. New Electrical Service required for increase building air conditioning and lighting requirements.
7. New Electrical Distribution system required throughout building.
8. New Lighting system throughout building.
9. Freight and Building elevators must be replaced.
10. Building Telephone system will have to be reviewed and expanded to meet increased building functions.

If you have any questions, please contact me.

Very truly yours,

COSENTINI ASSOCIATES


Richard Leber

RL:res

**LeMessurier
Associates, Inc**

5 August 1972

The Architects Collaborative
46 Brattle Street
Cambridge, Massachusetts 02138

Attention: Mr. Joseph D. Hoskins

Re: Charlestown Savings Bank (#8086)
Feasibility Study

Gentlemen:

Pursuant to your request, we are writing to summarize some of the pertinent items which have been discussed to date.

Based on our observations at the site on Tuesday, 1 August 1972 (in the presence of Mr. Brooks Cavin of TAC and Mr. Kenneth Ferguson of CSB), and a preliminary review of the "1959 remodeling drawings", it appears that the interior structural system of the existing main building (i.e., the one presently occupied by CSB) consists of round metal interior columns (perhaps cast-iron) supporting heavy timber girders which in turn support wood joists and wood floor deck. The exterior construction includes masonry cladding. Although the "1959 remodeling drawings" indicate metal perimeter columns at the street level, it was not possible from our initial observations to ascertain the extent of these. The smaller contiguous building appears to have masonry bearing walls and wood floor construction.

Thus, with reference to the current Boston Building Code, the two existing buildings would probably be categorized under "Section 217.0 Type 3 - Exterior Masonry Wall Construction". This category, as well as others, is further defined under "Section 221.0 Fire Resistance Rating and General Height and Area Limitations".

At this point, special emphasis should be directed to the current Boston Building Code, "Section 107. - Scope", which under Item (d) states in part, "A pre-code building which is altered

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Richard C. Penku
Frenz R. Schimmel
Dana P. Beach
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**LeMessurier
Associates, Inc**

Mr. Joseph D. Hoskins
Charlestown Savings Bank
5 August 1972
Page 2

or repaired within any period of twelve months, said alterations or repairs costing in excess of fifty percent of its physical value, shall be made to conform to the requirements of this code for post-code buildings... For the purpose of this paragraph physical value shall mean the reproduction cost of the building less physical deterioration as determined by the Building Commissioner." Furthermore, other paragraphs under this Section pertain to "... When occupancy of a pre-code building... is so changed that the hazard is increased..." and the requirement that the structural safety of the existing structure may have to be demonstrated by actual load tests. We recommend that you review the provisions of Section 107 in detail.

If it develops that we have to ascertain more precisely what the specific sizes of elements are, then we will have to undertake a more thorough site investigation of the existing conditions.

Please note that office buildings and banks are included under "Section 207.0 - Occupancy Group E - Business Buildings" of the current Boston Building Code. Now, if the Owner's requirements include an upgrading of the existing space to first class office construction, then the attendant costs might well exceed the limitations placed on the time-related increase in the physical value of the existing property. Therefore, the existing structure would have to be made to satisfy the requirements of the current code.

Hence, even assuming that the existing floor construction is adequate to safely sustain the new occupancy design loads, the floor construction would still have to be sandwiched between fire-rated materials such as lightweight concrete on top of the floor and plaster on the bottom of the joists. This arrangement would undoubtedly lead to a separate mechanical and electrical services plenum. Furthermore, the seismic requirements of the Boston Building Code would now also obtain and the lateral resistance of the building and the floor diaphragm would have to be modified.

We have also consulted with Golder-Gass Associates with regard to the existing soil conditions and foundations at the site. Based on some data which has been compiled by the Boston Society of Civil Engineers, the site bounded by Summer, Kingston, Bedford and Chauncy Streets appears to have a soil stratigraphy similar

**LeMessurier
Associates, Inc**

Mr. Joseph D. Hoskins
Charlestown Savings Bank
5 August 1972
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to that which obtains at the site for the new National Shawmut Bank of Boston, with one possible exception. There may not be a sand layer between the clay and the till at this site.

The existing buildings have one basement and are probably founded on spread footings. Therefore, any new construction up to approximately eight stories, plus one basement, would probably also have a spread footing foundation. However, any new construction higher than eight stories could conceivably have another type of foundation. (e.g., piles).

In any case, if any new building is contemplated, the columns should be located approximately ten feet from the face of any existing building or subway structure so as to obviate or minimize the need for any underpinning operations. However, the new construction must be developed with a view toward its influence on the existing subway.

Please call us if you require further clarification of the above.

Very truly yours,

LeMESSURIER ASSOCIATES, INC.

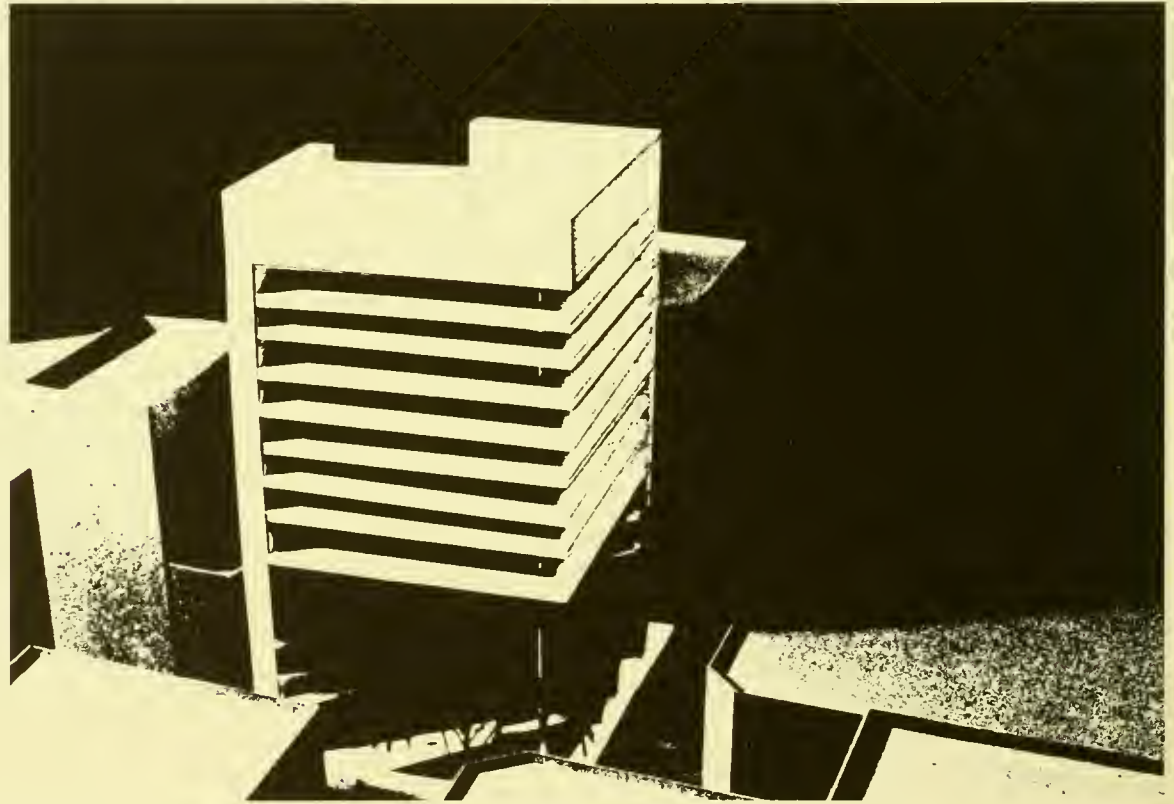
Hans William Hagen

Hans William Hagen

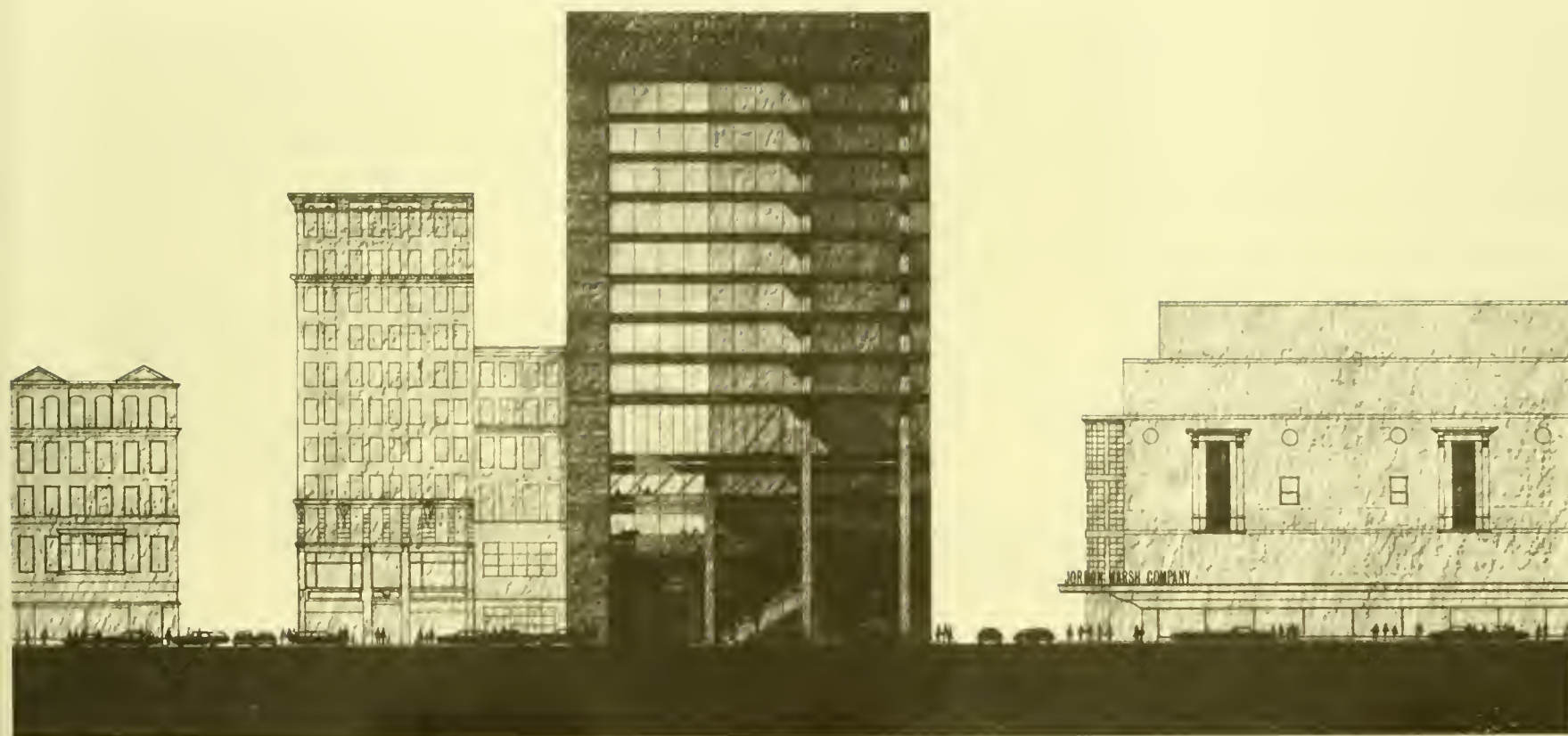
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3A

This 13-story proposal provides typical office floors of 10,200 GSF which provide very good flexibility. Because of the tower configuration, the scheme maximizes vistas, and office areas receive abundant natural light. The Kingston Street properties remain open as a possible future expansion possibility. The relatively small floor size and generous open space at street level result in a cost premium of approximately ten percent.



MODEL PHOTO

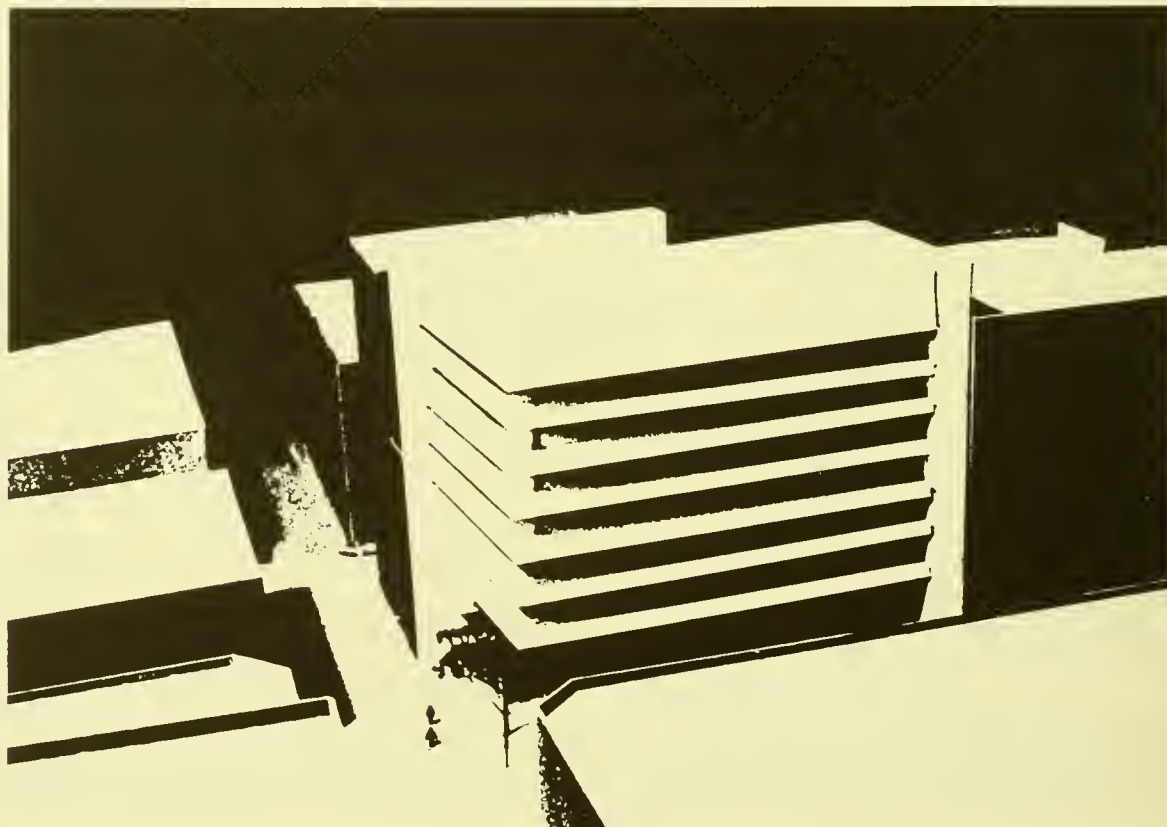


SUMMER ST. ELEVATION

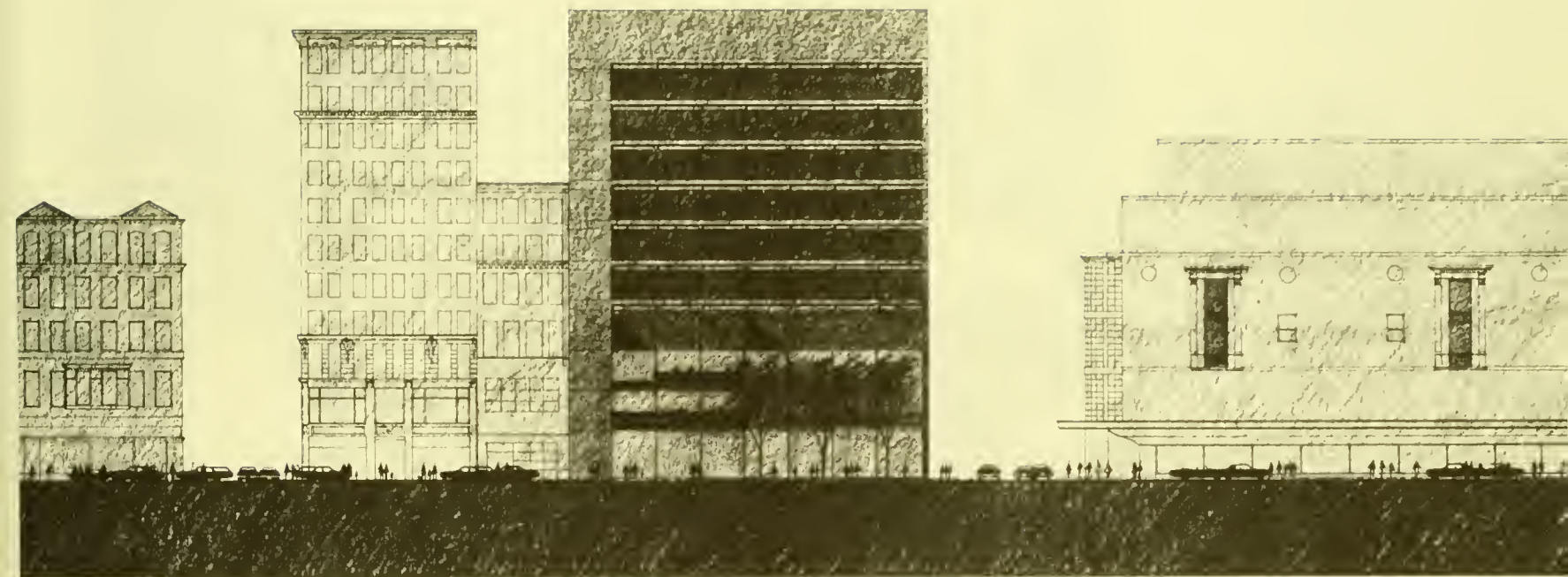
3A

3B

This 10-story proposal provides typical office floors of 13,200 GSF which provide very good flexibility. Because of the "L" configuration of the upper floors, the office areas receive abundant natural light and provide great flexibility. The Kingston Street properties allow interim use during phased construction and future expansion. Even though this scheme provides generous spaces at pedestrian level, the overall efficiency of the design allows an approximately ten percent cost savings compared to scheme 3A.



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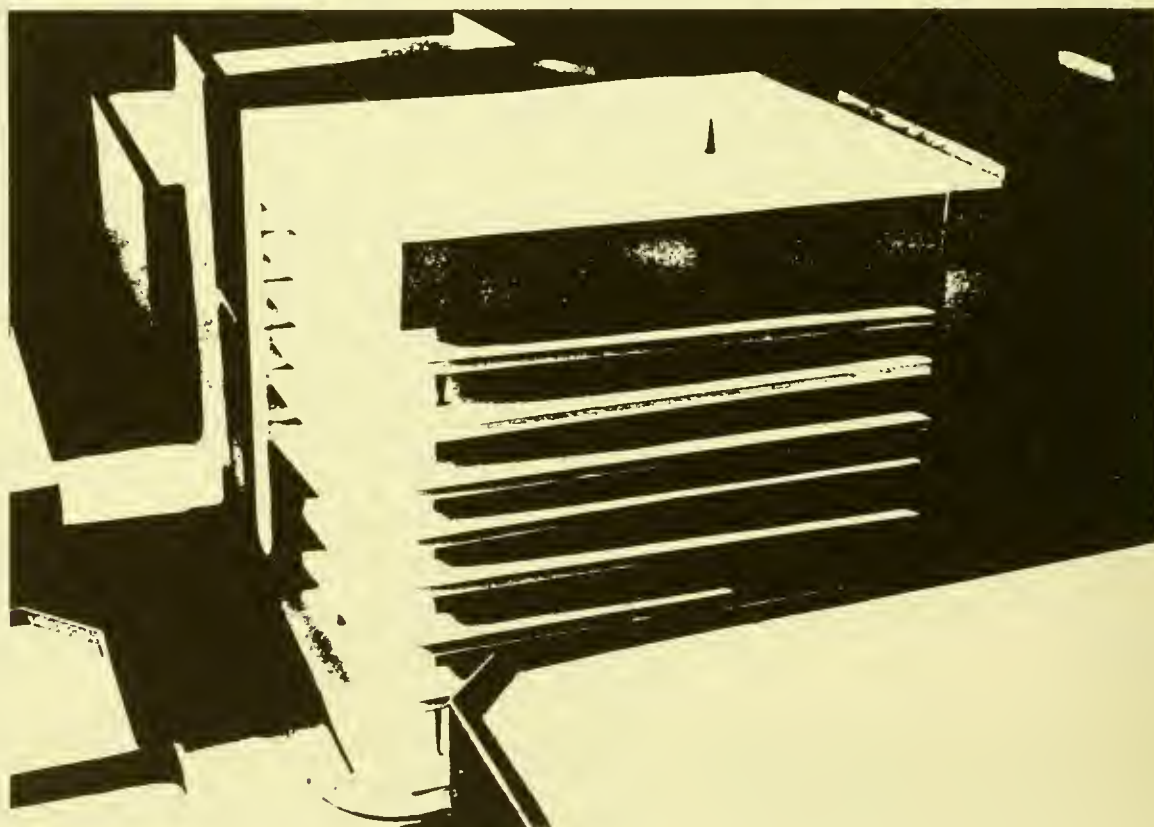


SUMMER ST. ELEVATION

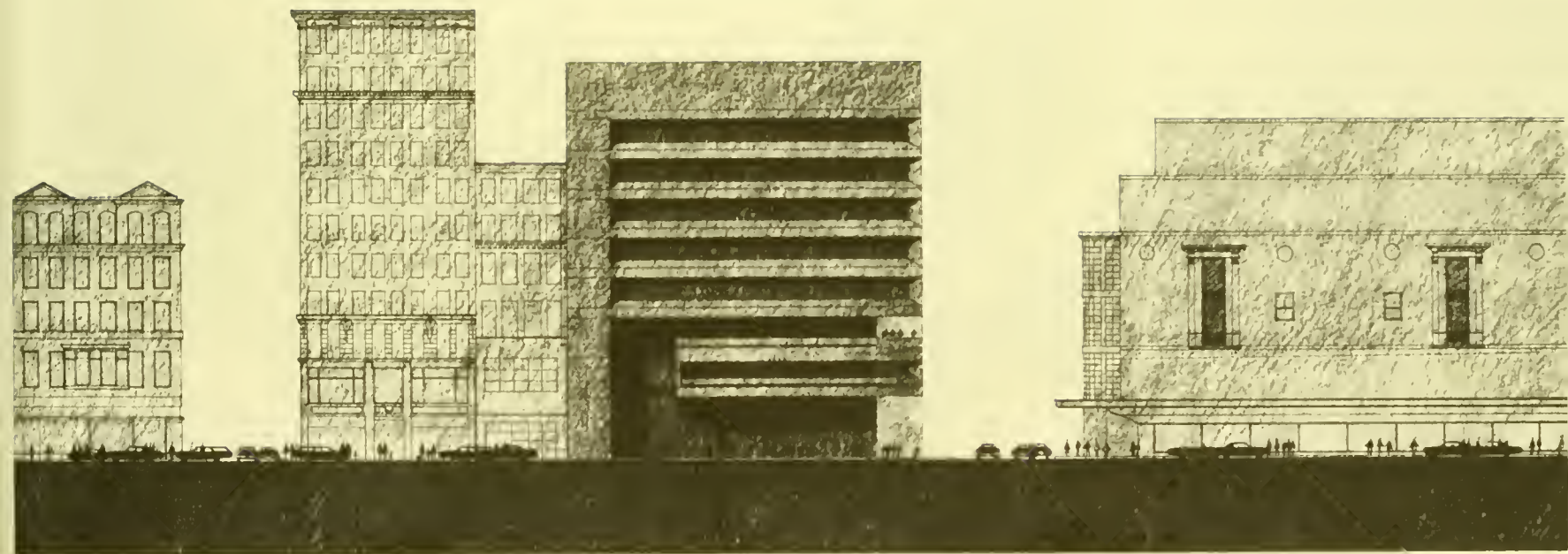
3B

3C

This 9-story proposal provides natural light to the office areas by introducing an interior court. The Kingston Street properties allow interim use during phased construction and future expansion. The interior court reduces typical office floor flexibility and generates a slight cost premium compared to proposal 3B.



MODEL PHOTO

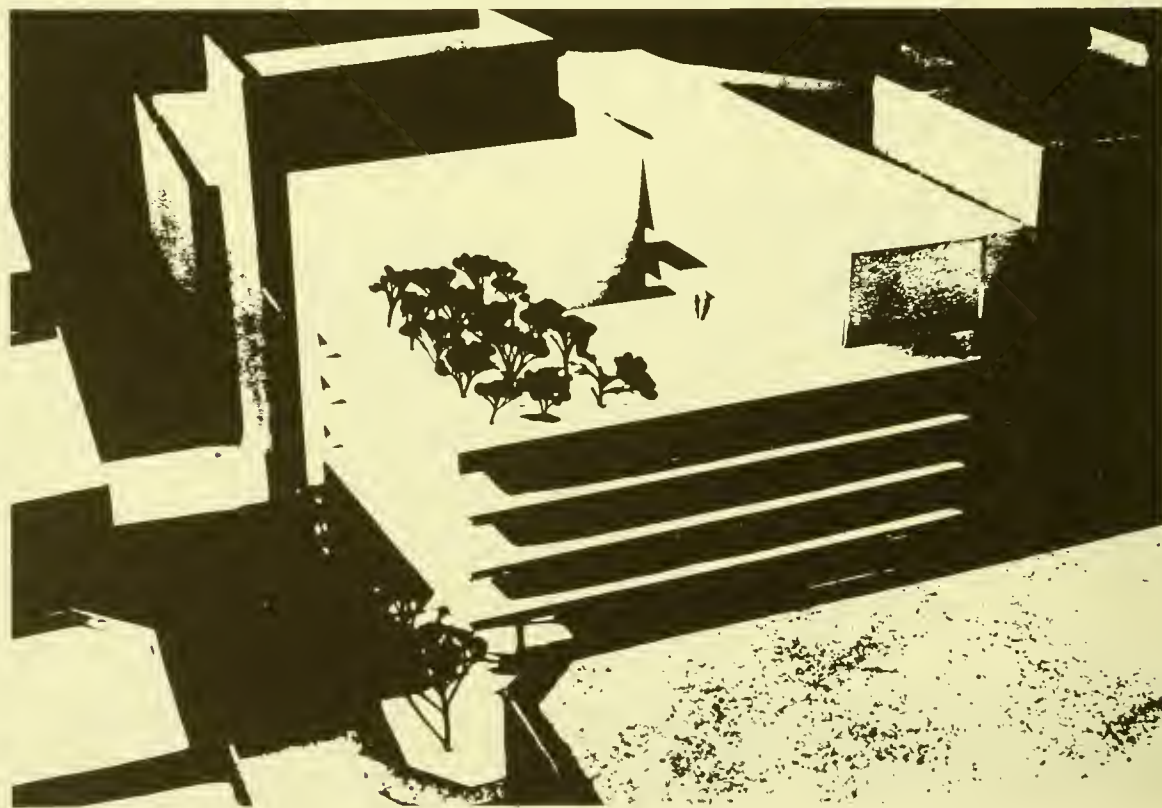


SUMMER ST. ELEVATION

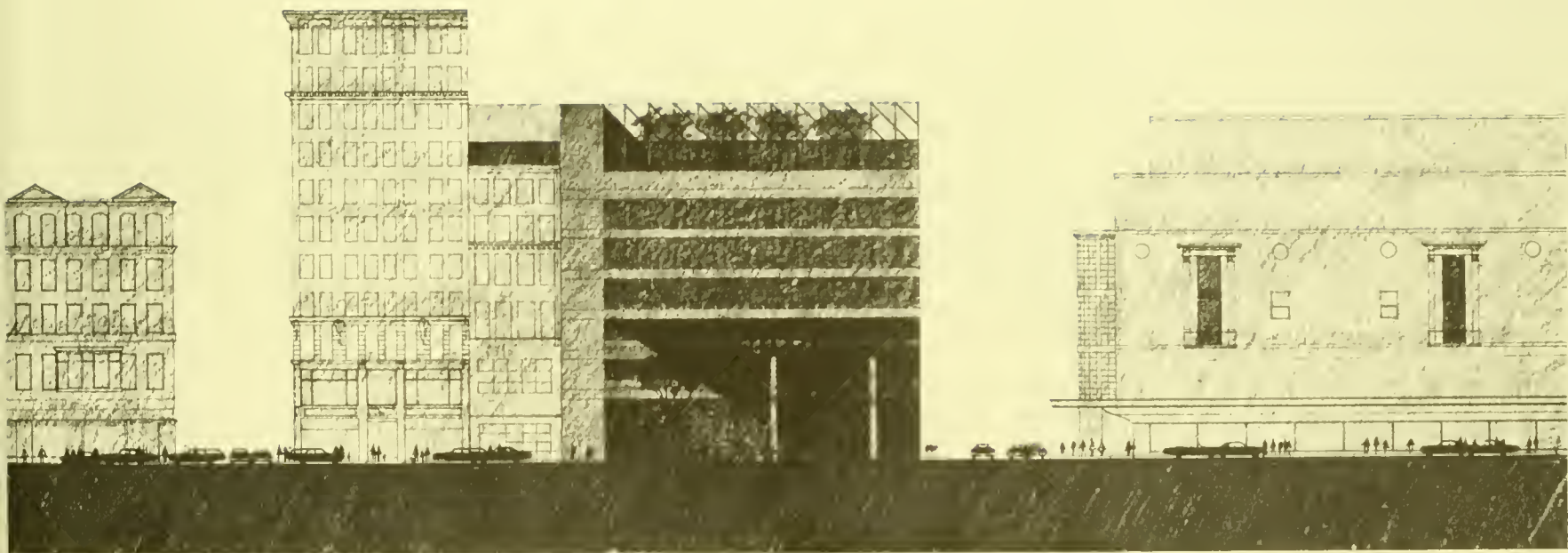
3C

3D

This 7-story proposal covers the entire site presently owned by the Charlestown Savings Bank. Although natural light is introduced into the center of the building through an interior court, it is felt that this scheme would not provide adequate natural light and flexibility to the office areas. None of the site remains for future expansion. Because of massing, this scheme realizes a very slight cost saving compared to scheme 3B.



MODEL PHOTO



SUMMER ST. ELEVATION

3D

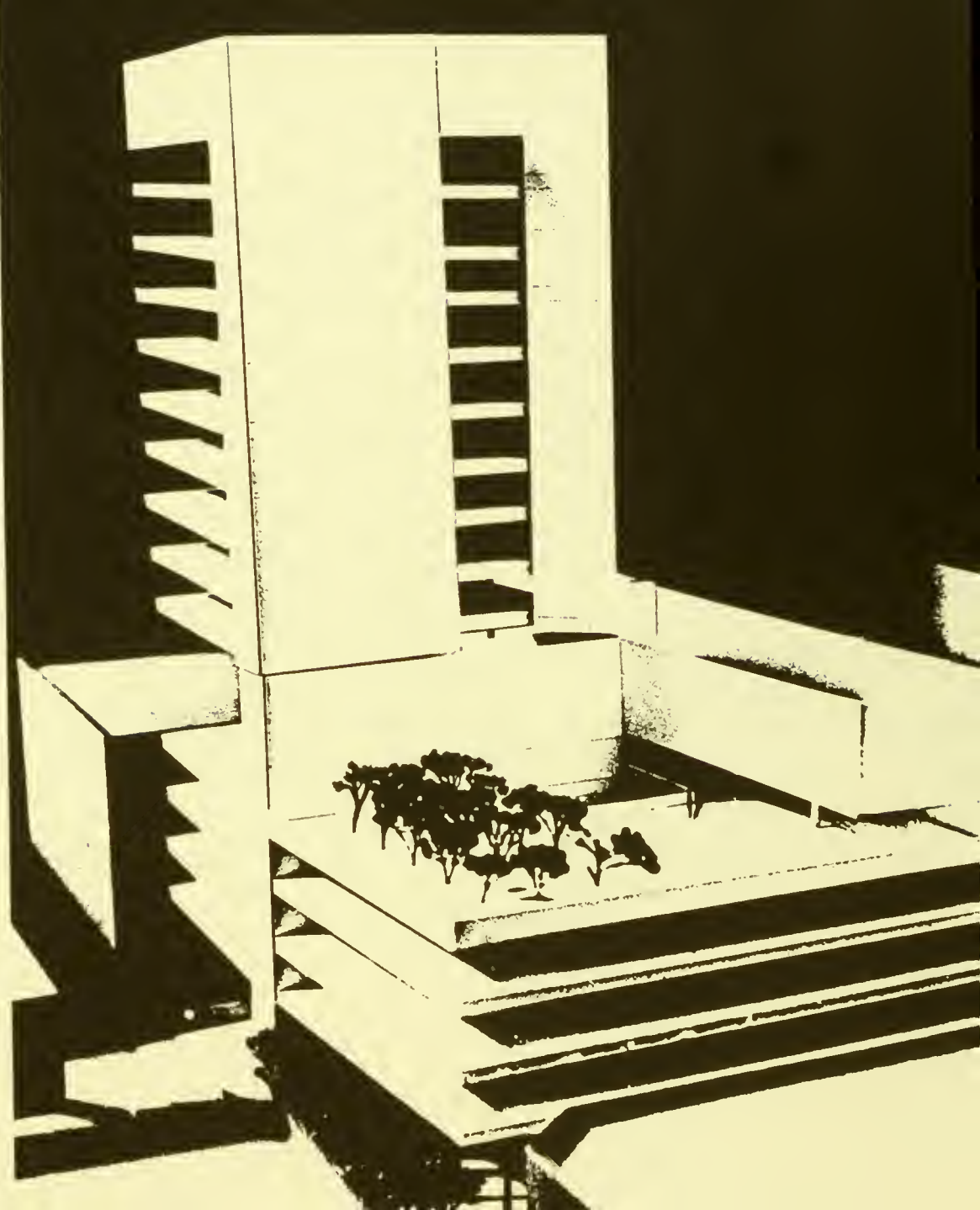
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This proposal considers the economics of the site as well as the program of the Charlestown Savings Bank. The purchase of 71 and 75/81 Summer Street in order to develop the resulting site as a unit to a program that takes full advantage of the floor area ratio of ten that is allowed for this site by the city of Boston. Although it is possible to pursue this from technical and cost standpoints, it has been decided that several arguments against this course outweigh the advantages. The main factor against developing a larger site than is presently owned by the Charlestown Savings Bank is that the Bank's program can be satisfied by several proposals using only the existing site. The Bank is primarily a banking institution; it does not want to become involved in large scale development projects at the present time. It is also felt that if the control of the project's size, schedule, and general direction is out of the Bank's hands, the urgent needs of the Bank may become secondary issues in relation to a larger project.

5

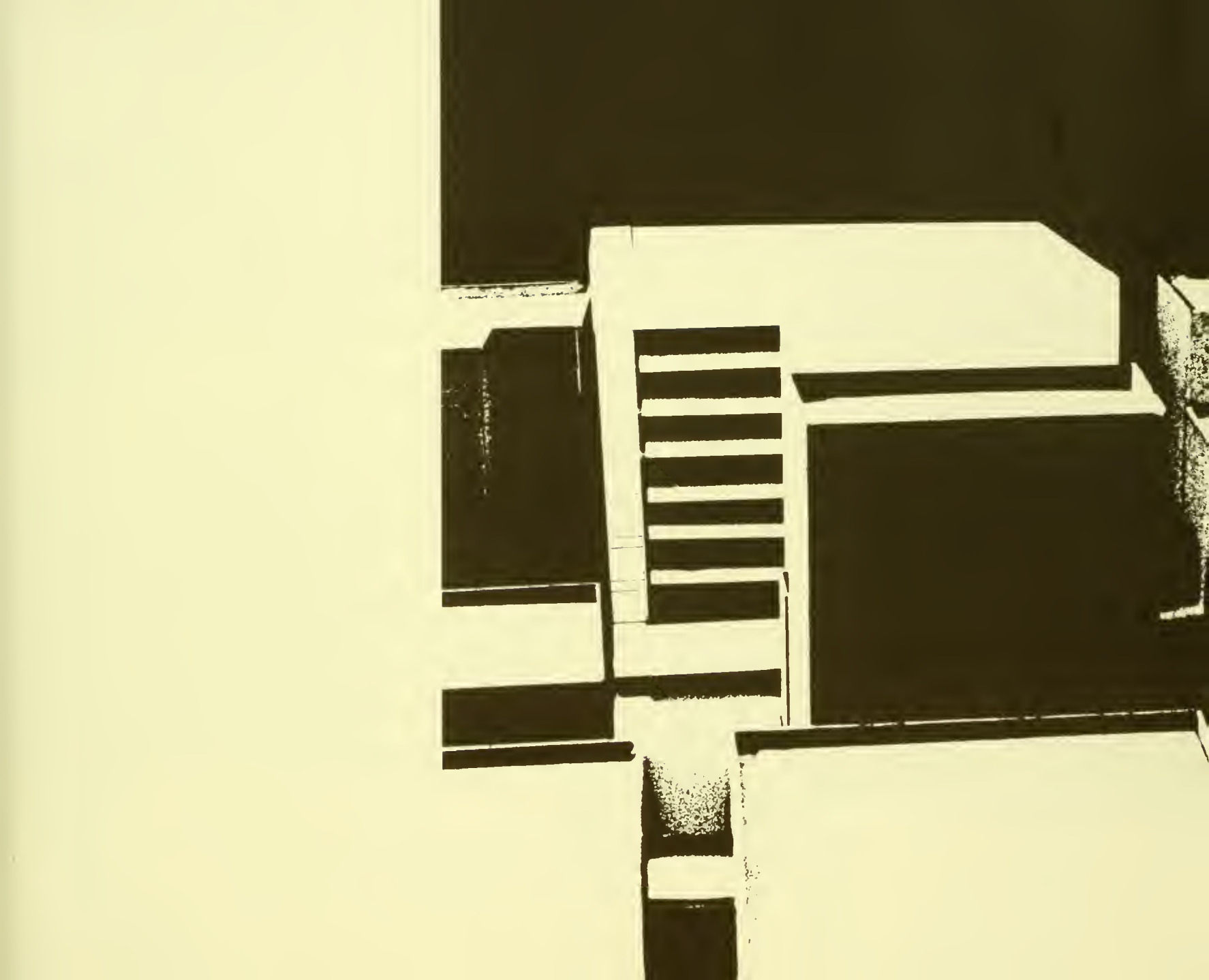
The option of purchasing or constructing a new Main Office at another location in the city has been dealt with at a policy level. Several proposals satisfying the Charlestown Savings Bank's program have been generated using only the site now owned by the Bank. It is, therefore, felt that the desire to maintain continuous image and operation at the present location rules out the choice of abandoning the existing site.

4



RECOMMENDATIONS





Recommendations	During the feasibility study careful consideration has been given to program requirements, functional efficiency and flexibility, cost, construction phasing, outdoor relationships, and expansion possibilities. The Architects Collaborative recommends that the Charlestown Savings Bank proceed immediately into schematic design pursuing proposal 3B in order to meet the objectives of the Main Office Expansion program.
Program	A building program of at least 128,000 GSF should be followed. Lower level tenant and Bank parking should be provided.
Efficiency	Typical office floor design should guarantee functional efficiency and flexibility for growth and change.
Cost	A project cost of \$6-\$8 million should be anticipated.
Phasing	Construction should be phased to allow continuous Bank operation on the site.
Expansion	Provisions should be made to allow for future expansion.



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